

REMARKS

Claims 7-13, 15-36, 40-53 and 64-69 were pending in the Application at the time the present Office Action was mailed. In the interest of expediting prosecution, claims 9, 12, 30-32, 34-36 and 40-53 have been cancelled without commenting on or conceding the merits of the rejections of these claims, and without prejudice to pursuing these claims in one or more continuing applications. Claim 11 has been rewritten in independent form to include all the features of the corresponding base claim and any intervening claims. Accordingly, claim 11 has not been substantively amended and any subsequent rejection of claim 11 based on new grounds cannot be made final. Claim 13 has been amended to broaden certain aspects of the claim. Accordingly, claim 13 has not been amended for any reason related to patentability. New claims 70-84 have been added. Based on the foregoing, claims 7, 8, 10, 11, 13, 15-29, 33, and 64-84 are now pending in the present application.

In the present Office Action, claims 13, 28 and 29 were allowed, and claims 7-12, 15-27, 30-36, 40-53 and 64-69 were rejected. As noted above, claims 9, 12, 30-32, 34-36 and 40-53 have been cancelled without prejudice. Accordingly, the rejections of claims 9, 12, 30-32, 34-36 and 40-53 are now moot. The remaining rejections of pending claims 7, 8, 10, 11, 13, 15-27, 33 and 64-69 are set forth below to facilitate the discussion that follows:

(A) Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP10-43258 ("JP '258") in view of U.S. Patent No. 5,136,741 to Balonick, et al. ("Balonick '741"), U.S. Patent No. 5,398,354 to Balonick, et al. ("Balonick '354"), and further in view of DE2308214 ("DE '214");

(B) Claims 17-22, 7, 8, 64-66, and 68 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of U.S. Patent No. 2,255,376 to Bull, et al. ("Bull");

(C) Claims 67 and 69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull, Balonick '741, and further in view of Balonick '354;

(D) Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull and further in view of DE3707948 ("DE '948");

(E) Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull, DE '948, and further in view of U.S. Patent No. 4,310,745 to Bender ("Bender '745");

(F) Claims 23, 24 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull and further in view of U.S. Patent No. 3,900,654 to Stinger ("Stinger '654");

(G) Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull and further in view of U.S. Patent No. 5,031,261 to Fenner, Sr. ("Fenner");

(H) Claim 27 was rejected under 35 U.S.C. § 103(a) as being patentable over JP '258 in view of Bull and further in view of JP3-165746 ("JP '746");

(I) Claim 33 was rejected under 35 U.S.C. § 103(a) as being patentable over JP '258 in view of Bull and further in view of CA969621 ("CA '621"); and

(J) Claims 7, 8, 10, 11, 15-27, 33 and 64-69 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-65 of U.S. Patent No. 6,653,607.

The undersigned attorney wishes to thank the Examiner for engaging in telephone conferences on February 24, 2004, and October 18, 2004. In the February 24 telephone conference, the undersigned attorney and the Examiner discussed various aspects of the references applied by the Examiner during prosecution of the parent application (i.e., 09/880,725). During the October 18 telephone conference, the undersigned attorney and the Examiner discussed various aspects of independent claims 11, 17 and 69 that distinguish over the applied references and require withdrawal of the present rejections. The following remarks expand on the topics discussed during the October 18 telephone conference and reflect the agreements reached.

A. Response to the Section 103 Rejection of Claim 11

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Balonick '741, Balonick '354, and further in view of DE '214.

1. Claim 11 is Directed to a Heating Pad System That Includes, *Inter Alia*, a Sealed Connector Secured to a Waterproof and Antimicrobial Cover

Claim 11 has been rewritten in independent form to include all the features of corresponding base claim 9. As such, claim 11 is directed to a heating pad system that includes a waterproof and antimicrobial cover enclosing at least a portion of an upper foam pad, a lower foam pad, and a thermal-electric heating element. The heating pad system further includes a power unit and a sealed connector. The sealed connector is secured to the waterproof and antimicrobial cover, and the power unit provides electrical power to the thermal-electric heating element via a utility cord connected to the sealed connector.

2. The Applied References Cannot Support a Section 103 Rejection of Claim 11 for at Least the Reason That the Applied References Fail to Teach or Suggest a Sealed Connector Secured to a Waterproof and Antimicrobial Cover

The Office Action relies on DE '214 to teach the sealed connector of claim 11. Specifically, the Office Action points to an unlabeled junction in Figure 1 of DE '214 between what appears to be a power cord 14 and a heating pad 1, and suggests that this nondescript feature can be construed as teaching all the attributes of the claimed connector. The undersigned attorney respectfully disagrees for the following reasons.

First, claim 11 requires a "connector." As discussed with the Examiner on October 18, however, the DE '214 reference provides no indication that the feature shown in Figure 1 is in fact a connector, much less a "sealed" connector. To the contrary, because of the vagueness of Figure 1, this feature could just as easily be a simple grommet that the power cord 14 passes through enroute to the heating element. Further, even assuming (and applicant expressly does not) that the feature in question

could be construed as a "connector," there is nothing in the DE '241 reference to suggest that this feature is "secured" to a "waterproof and antimicrobial cover." For at least these reasons, the applied references cannot support a proper Section 103 rejection of claim 11. Accordingly, as the Examiner acknowledged during the October 18 telephone conference, the rejection of claim 11 should be withdrawn.

B. Response to the Section 103 Rejection of Claims 17-22, 7, 8, 64-66 and 68

Claims 17-22, 7, 8, 64-66 and 68 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull.

1. Independent Claim 17 is Directed to a Heating Pad System That Includes, *Inter Alia*, a Foam Pad, Thermal-Electric Heating Element, and a Temperature Sensor Positioned Toward an Outer Surface of the Foam Pad Opposite to the Heating Element

Independent claim 17 is directed to a heating pad system that includes a thermal-electric heating element, a foam pad positioned adjacent to the thermal-electric heating element, and a power unit for providing electrical power to the thermal-electric heating element. The foam pad has a first surface facing toward the thermal-electric heating element, and a second surface facing away from the thermal-electric heating element. The heating pad system further includes a temperature sensor for measuring heating pad temperatures. In claim 17, at least a portion of the temperature sensor is positioned closer to the second surface of the foam pad than the first surface of the foam pad.

2. JP '258 and Bull Cannot Support a Section 103 Rejection of Independent Claim 17 for at Least the Reason That These References Fail to Teach or Suggest Positioning a Temperature Sensor as Recited in Claim 17

The Office Action relies on JP '258 and Bull to teach a heating pad system having a temperature sensor positioned toward an outer surface of a foam pad. JP '258, however, teaches a "sheet-like heater 2A" in which a temperature sensor 35 is positioned directly on a heating element 11. To overcome this deficiency, the Office

Action points to Bull. Bull, however, teaches a bi-metal thermostat 11 positioned "in close proximity" to heating elements 2 and 3. Figure 2 of Bull, for example, schematically illustrates the thermostat 11 between a separation layer 20 and a fabric cover 21.

Even accepting (and Applicant expressly does not) that Bull teaches positioning a temperature sensor toward an outer surface of a foam pad, there is still no motivation to modify JP '258 in this manner. Specifically, as the Examiner acknowledged during the October 18 telephone conference, it would be impractical to position temperature sensor 35 of JP '258 on the upper surface of insulating layer 10A because, as Figure 1(b) of JP '258 clearly illustrates, the sheet-like heater 2A is already positioned on top of a mat 1. Accordingly, as the Examiner further acknowledged, JP '258 and Bull cannot support a Section 103 rejection of independent claim 17 for at least this reason and the rejection should be withdrawn.

Claims 7, 8 and 18-22 depend from base claim 17. Accordingly, the applied references cannot support a Section 103 rejection of dependent claims 7, 8 and 18-22 for at least the reason that these references cannot support a Section 103 rejection of corresponding base claim 17, and for the additional features of these dependent claims. For example, dependent claim 18 recites that the temperature sensor is "embedded in the foam pad." Nowhere do the applied references teach or suggest embedding a temperature sensor in a foam pad. Accordingly, the Section 103 rejections of dependent claims 7, 8 and 18-22 should be withdrawn.

3. Independent Claim 64 is Directed to a Heating Pad That Includes, *Inter Alia*, a Temperature Sensor Carried by a Compressible Pad and Spaced Apart From a Heating Element

Independent claim 64 is directed to a heating pad that includes, *inter alia*, a heating element, a compressible pad positioned adjacent to the heating element, and at least a first temperature sensor for measuring heating pad temperatures. At least a portion of the first temperature sensor is carried by the compressible pad in a position that is spaced apart from the heating element. As discussed above with regard to claim 17, neither JP '258 nor Bull, either alone or in combination, teach or suggest this

feature. Accordingly, JP '258 and Bull cannot support a Section 103 rejection of independent claim 64 and the rejection should be withdrawn.

Claims 65-68 depend from base claim 64. Accordingly, the applied references cannot support a Section 103 rejection of dependent claims 65-68 for at least the reason that these references cannot support a Section 103 rejection of corresponding base claim 64, and for the additional features of these dependent claims. Therefore, the rejection of dependent claims 65-68 should be withdrawn.

C. Response to the Section 103 Rejection of Claims 67 and 69

Claims 67 and 69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull, Balonick '741, and further in view of Balonick '354.

Claim 67 depends from base claim 64. The applied references of JP '258 and Bull cannot support a Section 103 rejection of base claim 64 for at least the reasons discussed above with regard to the rejection of claim 64. Further, Balonick '741 and Balonick '354 fail to cure the deficiencies of JP '258 and Bull with respect to claim 64. (Indeed, the Office Action only relies on the Balonick references to teach an antimicrobial and waterproof cover.) Accordingly, the applied references cannot support a Section 103 rejection of dependent claim 67 for at least the reason that these references cannot support a Section 103 rejection of corresponding base claim 64, and for the additional features of this dependent claim. Therefore, the rejection of claim 67 should be withdrawn.

1. Independent Claim 69 is Directed to a Heating Pad That Includes, *Inter Alia*, a Flame-Resistant Sleeve Enclosing a Heating Element Between Upper and Lower Foam Pads

Independent claim 69 is directed to a heating pad that includes, *inter alia*, a flame-resistant sleeve enclosing at least a portion of a heating element. The flame-resistant sleeve and the heating element are sandwiched between an upper foam pad and a lower foam pad. As the Examiner acknowledged during the October 18 telephone conference, none of the applied references teach or suggest the heating pad

of claim 69. Accordingly, as the Examiner further acknowledged, the rejection of claim 69 should be withdrawn.

D-I. Response to the Section 103 Rejections of Dependent Claims 15, 16, 23-27 and 33

Dependent claims 15, 16, 23-27 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '258 in view of Bull, and further in view of various other of the applied references including DE '948, Bender, Stinger, Fenner, JP '746, and CA '621. Each of these claims depends from base claim 17. JP '258 and Bull cannot support a Section 103 rejection of base claim 17 for at least the reasons discussed above with regard to the Section 103 rejection of this claim. Further, the other applied references of DE '948, Bender, Stinger, Fenner, JP '746 and CA '621 fall to cure the deficiencies of JP '258 and Bull in regard to base claim 17. Accordingly, the applied references cannot support a Section 103 rejection of dependent claims 15, 16, 23-27 and 33 for at least the reason that these references cannot support a Section 103 rejection of corresponding base claim 17, and for the additional features of these dependent claims. Therefore, the rejection of dependent claims 15, 16, 23-27 and 33 should be withdrawn.

J. Response to the Double Patenting Rejection of Claims 7, 8, 10, 11, 15-27, 33 and 64-69

Claims 7, 8, 10, 11, 15-27, 33 and 64-69 were rejected under the judicially created doctrine of obviousness-type double-patenting as being unpatentable over claims 1-65 of U.S. Patent No. 6,653,607. The applicant respectfully traverses this rejection. However, in the interest of expediting prosecution, the applicant elects to file a timely terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) to overcome this rejection. Accordingly, the double-patenting rejection of claims 7, 8, 10, 11, 15-27, 33 and 64-69 should be withdrawn.

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K. New Claims 70-84

New claims 70-84 have been added by this response. Claims 70-74 depend from pending base claim 69, and claims 75-80 depend from pending base claim 13. As discussed with the Examiner on October 18, new independent claim 81 is at least generally similar to allowed claim 13, but with a different sleeve limitation that the Examiner acknowledged is also patentable over the applied references. Claims 82-84 depend from new base claim 81.

L. Conclusion

In view of the foregoing, the claims pending in the application comply with 35 U.S.C. § 112 and patentably define over the applied art. Therefore, a Notice of Allowance is respectfully requested. If the Examiner has any questions or believes another telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-6351.

Respectfully submitted,

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